

Patent Application by

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Do not enter (sub. spec. filed 1/28/85)
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TITLE: AQUATIC WEED SUPPRESSOR

CROSS REFERENCE TO RELATED APPLICATIONS

Not applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

There was no Federal support for this research or development.

BACKGROUND - FIELD OF INVENTION

This invention is in the field of the suppression of sub-surface aquatic weed growth.

BACKGROUND - DESCRIPTION OF PRIOR ART

Some relative patents:

4056936	Nov 1977	Mayer	405/302.7
4518280	May 1985	Fletcher	405/17
4577996	Mar 1986	Elias, Fletcher	405/17

The problem with weed infestation in relatively shallow (eight feet or less) bodies of water whether they be ponds, lakes, canals, irrigation ditches, or tidal areas has been increasingly obvious. (See: Michigan State University manual E-2437 issued 12/98 titled "Aquatic Pest Management" with particular reference to Chapter 6. Another relative article can be found at "www.Army.mil/el/aqua/apis/mechanical/eurasian.html). The condition is evident in almost any

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Description of the Drawings

Fig. 1 is a view of the aquatic weed suppressor in position on the bottom of a water body. It illustrates the effect of the buoyancy of the plastic where it forms a convex surface anchored by the lateral hold down means as well as some of the plethora of possible gas release port configurations.

Figure 2 is a view of the aquatic weed suppressor in position on an irrigation ditch showing the hold down means.

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Description of Preferred Embodiments

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Bearing in mind that the intention is to provide a means for the suppression of the growth of aquatic weeds that is inexpensive, environmentally unobtrusive, and readily installed and maintained by a property owner, I am proposing the following as the preferred embodiment for the lake application (Refer to Figure 1):

A sheet of polyethylene (5) of width approximately 12 feet and length approximately 40 feet has positioned laterally, about every 5 feet, weights (4) for the purpose of holding the plastic sheet to the bottom of the body of water. The weights are rebar encased in and attached to the plastic sheet with sand filled hot melt glue. The hot melt glue provides the attachment and the rebar and sand provide the weight. Midway between the laterally placed weights are slits cut in the plastic (6) spaced laterally about 2 feet apart. Attached to the end lateral weights (3) are rope handles (10) to facilitate installation and removal. The plastic sheet between the hold down means assumes a convex configuration (12) which directs the gasses of decomposition to the gas release ports (6).

This benthic barrier is installed by positioning the plastic sheet (accordion pleated at assembly) on the stern of a row boat; the free end is pulled off by the rope handle and held while the boat is rowed away and the plastic sheet pulled into the water. When fully dispensed the barrier is pulled reasonably taught and released to settle to the bottom. Its removal is the reverse of the above. It is expected that the barrier will be removed or repositioned at least every growing season to minimize sediment accumulation problems. To cover large areas multiple barriers are positioned adjacent to each other.

For the irrigation and drainage ditch application (Figure 2) the plastic sheet (5) would be of width adequate to bridge the ditch and of length limited by ease of application. The lateral hold down means (4) are either tubes attached to the plastic sheet filled with aggregate or sand filled hot melt

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glue attached to the plastic by the glue and spaced about 3 feet apart.

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Note: While there has been disclosed effective and efficient embodiments of the invention, it should be well understood that the invention is not limited to such embodiments, as there are changes that can be made in the arrangement, form, materials and attachment means without departing from the principle of the present invention as comprehended within the scope of the accompanying claim.